

ABSTRACT

The invention relates to improved *E. coli* bacteria with enhanced viability at low temperatures, methods for producing improved bacterial strains capable of enhanced viability at low temperatures, and the isolation and use of genetic material capable of enhancing the viability of bacteria at low temperatures. In addition to the enhanced viability at low temperatures, the bacteria may exhibit enhanced transformation efficiencies after storage at low temperatures. As such, the invention may be used for the insertion of exogenous DNA sequences into the bacteria of the invention.